

IN THE CLAIMS:

Please amend claims 28 and 30 and add new claims 34 and 35 so that the claims read as follows:

1. (Previously Presented) A ventilator circuit for use in administering medication to a patient, the ventilator circuit comprising:

a chamber housing defining an interior space and comprising an input end and an output end;

a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;

a first inhalation conduit communicating with said output end of said chamber, said first inhalation conduit comprising an inlet communicating with said output end of said chamber housing and an outlet adapted to transmit medication to the patient, wherein said inlet and outlet are axially aligned with said output end of said holding chamber;

a second inhalation conduit communicating with said input end of said chamber housing, wherein said one-way inhalation valve is located in said second inhalation conduit, said second inhalation conduit comprising an oxygen intake line communicating with said one-way inhalation valve;

an exhaust conduit communicating with said first inhalation conduit at a location positioned between said inlet and said outlet of said first inhalation conduit; and

a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said first inhalation conduit.

Claim 2 (Cancelled).

3. (Previously Presented) A ventilator circuit for use in administering medication to a patient, the ventilator circuit comprising:

- a chamber housing defining an interior space and comprising an input end and an output end, wherein said interior space has a first cross-sectional area defined substantially perpendicular to a longitudinal flow direction adjacent said input end;

- a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;

- a first inhalation conduit communicating with said output end of said chamber, said first inhalation conduit adapted to transmit medication to the patient;

- a second inhalation conduit communicating with said interior space of said chamber housing at said input end, wherein said second inhalation conduit has a second cross-sectional area defined substantially perpendicular to the longitudinal flow direction at said input end, wherein said second cross-sectional area is less than said first cross-sectional area, wherein said one-way inhalation valve is located in said second inhalation conduit, said second inhalation conduit comprising an oxygen intake line communicating with said one-way inhalation valve;

- an exhaust conduit communicating with said first inhalation conduit;

- a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said first inhalation conduit; and

- a pressurized metered dose inhaler in flow communication with said second inhalation conduit downstream of said one-way inhalation valve and upstream of said interior space of said chamber housing.

4. (Previously Presented) The ventilator circuit of claim 3 wherein said second inhalation conduit comprises an adapter having an output end connected to said input end of said chamber housing and an input end connected to said oxygen intake line, said adapter having said one-way inhalation valve disposed therein.

5. (Previously Presented) The ventilator circuit of claim 1 wherein said one-way inhalation valve comprises a valve member, a valve seat and a blocking member disposed in said second inhalation conduit, wherein said blocking member is spaced downstream from said valve seat, and wherein said valve member is disposed between said blocking member and said valve seat.

6. (Original) The ventilator circuit of claim 5 wherein said valve member is a center post valve member connected to said valve seat.

7. (Original) The ventilator circuit of claim 5 wherein said blocking member has at least one opening formed therein to permit the flow of gases therethrough.

8. (Previously Presented) The ventilator circuit of claim 1 wherein said first inhalation conduit comprises an endotracheal tube.

9. (Previously Presented) The ventilator circuit of claim 1 wherein said first inhalation conduit comprises a mask.

10. (Previously Presented) The ventilator circuit of claim 1 comprising an adapter connected to said output end of said chamber housing and comprising a first portion defining at least a portion of said first inhalation conduit and a second portion defining at least a portion of said exhaust conduit, wherein said one-way exhaust valve is positioned in said second portion of said adapter, and further comprising an

exhaust line connected to said second portion and defining at least a portion of said exhaust conduit.

11. (Previously Presented) A ventilator circuit for use in administering medication to a patient, the ventilator circuit comprising:

- a chamber housing defining an interior space and comprising an input end and an output end;

- a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;

- an inhalation conduit communicating with said output end of said chamber, said inhalation conduit adapted to transmit medication to the patient;

- an exhaust conduit communicating with said inhalation conduit;

- a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said inhalation conduit; and

- an adapter connected to said output end of said chamber housing and comprising a first portion defining at least a portion of said inhalation conduit and a second portion defining at least a portion of said exhaust conduit, wherein said one-way exhaust valve is positioned in said second portion of said adapter, and further comprising an exhaust line connected to said second portion and defining at least a portion of said exhaust conduit, wherein said first portion defines a first passageway having a first and second channel and wherein said second portion comprises a second passageway, and wherein said adapter further defines a third passageway communicating between said first passageway and second passageways, wherein said one-way exhaust valve is disposed in said second passageway.

12. (Original) The ventilator circuit of claim 11 further comprising a connector member connecting said second portion and said exhaust line.

13. (Original) The ventilator circuit of claim 11 wherein said first channel has a first cross-sectional area and said second channel has a second cross-sectional area, wherein said second cross-sectional area is greater than said first cross-sectional area.

14. (Original) The ventilator circuit of claim 13 further comprising a shoulder formed at the interface of said first and second channels, and wherein said third passageway communicates with said second channel at said shoulder.

Claims 15-23 (Cancelled).

24. (Previously Presented) A method of administering a medication to a patient comprising:

- transmitting oxygen from a ventilator through a holding chamber and an inhalation conduit to the patient during an inhalation sequence of a breathing cycle;

- introducing said medication into said holding chamber;

- preventing a substantial transmission of an exhaust gas into said holding chamber during an exhalation sequence of said breathing cycle;

- transmitting a substantial portion of said exhaust gas into an exhaust conduit during said exhalation sequence; and

- preventing a substantial transmission of said exhaust gas from said exhaust conduit into said inhalation conduit during subsequent inhalation sequences of subsequent breathing cycles; and

- transmitting said substantial portion of said exhaust gas from said exhaust conduit to said ventilator during said exhalation sequence.

25. (Original) The method of claim 24 wherein said preventing said substantial transmission of said exhaust gas into said holding chamber during said exhalation sequence comprises creating a back pressure in said holding chamber.

26. (Original) The method of claim 25 wherein said creating said back pressure in said holding chamber comprises providing a one-way valve between said gas source and said holding chamber, and preventing the flow of said exhaust gas from said holding chamber toward said gas source with said one-way valve.

27. (Original) The method of claim 25 wherein said preventing a substantial transmission of said exhaust gas from said exhaust conduit into said inhalation conduit during subsequent inhalation sequences comprises providing a one-way valve in said exhaust conduit, and preventing the flow of said exhaust gas from said exhaust conduit to said inhalation conduit with said one-way valve.

28. (Currently Amended) ~~[[A]] The ventilator circuit of claim 3 further comprising for use in administering medication to a patient, the ventilator circuit comprising:~~

~~a chamber housing defining an interior space and comprising an input end and an output end;~~

~~a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;~~

~~a first inhalation conduit communicating with said output end of said chamber, said first inhalation conduit adapted to transmit medication to the patient;~~

~~a second inhalation conduit communicating with said input end of said chamber housing, wherein said one-way inhalation valve is located in said second~~

~~inhalation conduit, said second inhalation conduit comprising an oxygen intake line communicating with said one-way inhalation valve;~~

~~an exhaust conduit communicating with said first inhalation conduit;
a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said first inhalation conduit; and~~

~~a WYE connector connecting said second inhalation conduit and said exhaust conduit.~~

29. (Original) The ventilator circuit of claim 1 wherein said second inhalation conduit is isolated from and does not communicate with ambient air.

30. (Currently Amended) [[A]] The ventilator circuit of claim 3 for use in administering medication to a patient, the ventilator circuit comprising:

~~a chamber housing defining an interior space and comprising an input end and an output end;~~

~~a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;~~

~~a first inhalation conduit communicating with said output end of said chamber, said first inhalation conduit adapted to transmit medication to the patient;~~

~~a second inhalation conduit communicating with said input end of said chamber housing, wherein said one-way inhalation valve is located in said second inhalation conduit, said second inhalation conduit comprising an oxygen intake line communicating with said one-way inhalation valve;~~

~~an exhaust conduit communicating with said first inhalation conduit;
a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said first~~

~~inhalation conduit, and~~ wherein said oxygen intake line and said exhalation conduit are connected to a ventilator.

Claim 31 (Cancelled).

32. (Previously Presented) The method of claim 26 wherein said providing a one-way valve between said gas source and said holding chamber comprises providing an inhalation conduit communicating with an input end of said holding chamber, wherein said one-way valve is disposed in said inhalation conduit, and wherein said introducing said medication into said holding chamber comprises introducing said medication into said inhalation conduit between said holding chamber and said one-way valve.

33. (Previously Presented) A ventilator circuit for use in administering medication to a patient, the ventilator circuit comprising:

- a chamber housing defining an interior space and comprising an input end and an output end;

- a one-way inhalation valve positioned upstream of said interior space, said one-way inhalation valve operative to permit a flow of gases into said interior space of said chamber housing;

- a first inhalation conduit communicating with said output end of said chamber, said first inhalation conduit comprising an outlet adapted to transmit medication to the patient, wherein a flow path between said interior of said chamber housing and said outlet of said first inhalation conduit through said output end of said chamber housing is free of any valve structure;

- a second inhalation conduit communicating with said input end of said chamber housing, wherein said one-way inhalation valve is located in said second

inhalation conduit, said second inhalation conduit comprising an oxygen intake line communicating with said one-way inhalation valve;

an exhaust conduit communicating with said first inhalation conduit;

and

a one-way exhaust valve located in said exhaust conduit, said one-way exhaust valve adapted to prevent a backflow of gas from said exhaust conduit into said first inhalation conduit.

34. (New) The ventilator circuit of claim 33 further comprising a WYE connector connecting said second inhalation conduit and said exhaust conduit.

35. (New) The ventilator circuit of claim 33 wherein said oxygen intake line and said exhalation conduit are connected to a ventilator.